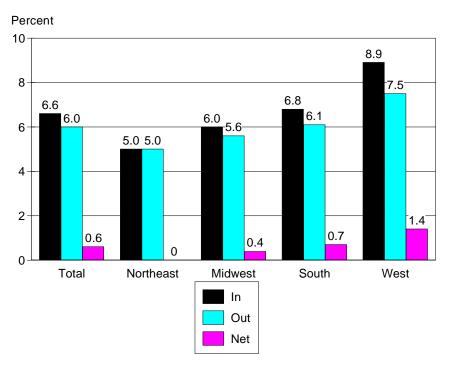
Migration Contributes to Nonmetro Per Capita Income Growth

Recent migration into and out of nonmetro counties increased nonmetro per capita income, especially in rapidly growing, high-amenity settings. Incomes of nonmetro inmigrants exceeded incomes of outmigrants in all types of nonmetro counties except those dependent on mining.

uring the post-1990 nonmetro population growth spurt, the higher income of inmigrants compared with outmigrants increased overall nonmetro per capita income by an estimated \$30 a year. Between April 1992 and April 1995, the average per capita income was \$11,176 for inmigrants and \$10,579 for outmigrants. Mirroring these patterns, metro outmigrants were slightly wealthier than inmigrants, creating a \$4 annual drop in metro incomes. Migration increased per capita income in roughly half of all nonmetro counties. The effect varied from -\$763 to \$1,666. However, 81 percent of nonmetro counties fell in the range of -\$100 to \$100.

Recent income growth due to migration coincides with a nonmetro population revival. Nonmetro areas currently have higher levels of inmigration from metro areas and lower outmigration to metro areas than in the previous decade. Movement to and from metro areas—along with county-to-county migration within nonmetro territory—sustains an ongoing redistribution of population, causing some areas to grow rapidly while others decline. During 1992-95, the average nonmetro county grew 6.6 percent per year from inmigration but lost 6.0 percent to outmigration. The net effect was a 0.6-percent increase in population per year. These gains stand in contrast to several years of population loss from net migration during the mid-1980's. In addition, migration patterns varied across regions, consistently favoring the West and South (fig. 1). During 1992-95, the nonmetro Northeast did not grow at all from net migration because inmigration equaled outmigration. At the same time, inmigration to the nonmetro West was substantially higher than outmigration, leading to annual gains of 1.4 percent from net migration.

Figure 1
Nonmetro annual population change from migration, by region, 1992-95
The West experienced highest rates of in- and outmigration



Note: See appendix for definition of regions.

Source: Calculated by ERS using data from the Internal Revenue Service.

High-Amenity Counties Lead in Migration-Induced Income Growth

The effect of migration on local communities and economies depends not only on migration rates, but also on the characteristics of the in- and outmigrants and how they compare with characteristics of residents who do not move (nonmigrants). Attributes such as age, education, job skills, health status, and income influence job growth and alter the demand for public services such as education, income maintenance, and health care. In recent years, low-income families have been migrating as readily as those better off, but have been following somewhat different migration paths. An influx of low-income migrants poses a very different set of challenges to a community than an influx of high-income migrants.

Using county-level data provided by the Internal Revenue Service on the number and aggregate income of inmigrants, outmigrants, and nonmigrants, we calculated the effect of migration on county per capita income during 1992-95. (See box below for a description of the data.) Earnings and nonearnings are combined so we cannot separate the effect of nonearnings income that migrants bring with them (or take away) from the effect of the higher or lower earnings income migrants receive once they move. The effect of migration on income had a fairly strong geographic pattern. Nonmetro counties that experienced rising income as a result of migration were concentrated at the suburban fringe of expanding metro areas and in areas of high natural amenities, especially in the

About the Estimates and the Calculation of Migration's Effect on Income

The Internal Revenue Service (IRS) compiles annual county-level domestic migration data by matching current-year tax returns with those from the previous year and comparing addresses. If a county of residence is different in the previous year, members of that family are considered migrants. If the county is the same, they are considered nonmigrants. The number of exemptions claimed on the return serves as a proxy for the number of migrants in that family. Most people file their returns during early to mid-April, so the data here refer to flows from April of one year to April the next.

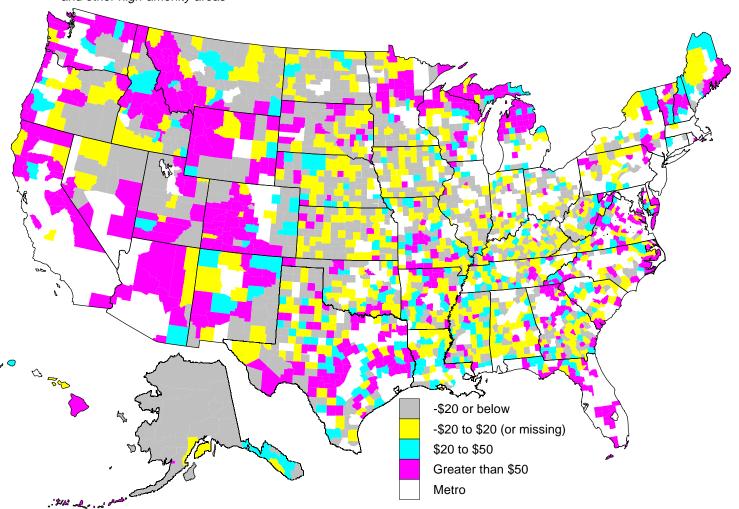
Beginning in 1993, county-level data on aggregate income of inmigrants, outmigrants, and nonmigrants were added to this file. To summarize the effect of migration on per capita income, we calculated the change in county per capita income that resulted from the recorded migration, computed as the combined per capita income of the county's inmigrants and nonmovers less the combined per capita income of outmigrants and nonmovers. An average of three sets of flows, 1992-93, 1993-94, and 1994-95, was used to reduce random measurement errors and the disturbances caused by uncharacteristic single-year events. Eleven nonmetro counties lacked valid migration or income data for one or more years and were excluded from the analysis.

For most persons, income during the year of a move is lower than their multi-year average income. Often some work is missed during a move, and moves are sometimes precipitated by loss of employment and preceded by a period of unemployment or underemployment. Nevertheless, the "income effect of migration" should serve reasonably well as a relative indicator, since the downward bias should affect inmigrants and outmigrants similarly. When interpreting the absolute value of the difference between income of movers and nonmovers, however, this bias should be kept in mind.

IRS migration data cover roughly 80 percent of the migrating population, offering a window into detailed, annual population dynamics not available elsewhere. Coverage varies geographically and is demographically selective—those likely to be left out include college and military migrants, labor force entrants, and the long-term unemployed. Common data adjustments used at the State level to partially correct for geographic variation of missing individuals have not been applied here; adjustments at the county level may create more problems than they solve because the demographic groups left out most likely have very different geographic migration patterns than the population as a whole.

intermountain West and the Pacific coastal ranges, but also in the eastern Appalachians, the Ozark-Ouachita Plateau, the Upper Great Lakes, and parts of rural New England (fig. 2). Counties that experienced declining income as a result of migration (either due to low-income inmigration or high-income outmigration) are concentrated in the Great Plains, the Corn Belt, the western Appalachians, and to a lesser degree throughout the southeastern Coastal Plain. Several such counties are also scattered in the interior West and Northwest.

Figure 2
Nonmetro annual per capita income change from migration, 1992-95
Migrants raise per capita income in the Rocky Mountains, Great Lakes,
and other high-amenity areas



Notes: 1993 metro definitions. Statistics calculated separately for 1992-93, 1993-94, and 1994-95, then averaged. Values set to zero for 26 nonmetro counties with unreported income data.

Source: Calculated by ERS using data from the Internal Revenue Service.

During 1992-95, most nonmetro counties with high net inmigration attracted migrants with high incomes relative to those of outmigrants, while the reverse held for counties with net outmigration. However, a substantial minority of high-inmigration counties did attract inmigrants with incomes well below those of outmigrants. These low-income destination counties are scattered throughout the Midwest and in historically high-poverty areas of the East and Southeast. Interestingly, there are also a number interspersed with the high-income destination counties in the intermountain West. This juxtaposition may in part reflect a commonly expressed concern, that low- and middle-income persons are attracted to the service jobs opening up in the intermountain West but are unable to live in the high-amenity counties where the jobs are concentrated because of the rapidly rising cost of land and housing in those counties.

Income Benefits Accrue to Highly Rural Settings and Retirement Destinations

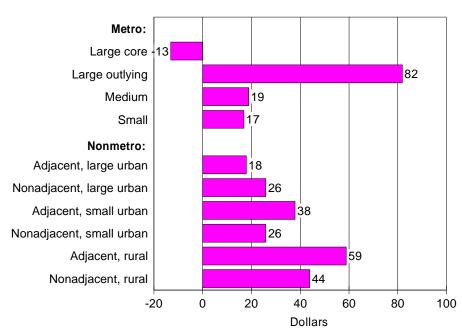
During the early 1990's, the attractiveness of sparsely settled, isolated locations increased dramatically for rural migrants. At the same time, the pull of natural amenities remained high and that of economic opportunities associated with amenity-based economies increased. The increasing importance of residential and recreational desirability creates new opportunities for remote rural areas, but raises the question of whether the benefits of migration to local economies also extend across the rural-urban spectrum.

The effect of migration on income varied across the rural-urban continuum as measured by the 1993 ERS rural-urban categories (see appendix for a description), and sparsely settled areas appear to have fared rather well. The most notable effects were in large metro areas, lowering income in the core counties and raising income in fringe counties surrounding them. But there were also substantial positive effects on income in most of the nonmetro categories, and especially in the most rural categories. Income effects were generally higher in counties adjacent to metro areas than in nonadjacent counties with similar size urban populations. Within nonmetro nonadjacent territory, per capita incomes grew by \$44 per year from migration in rural counties compared with \$26 in urban counties (fig. 3).

Figure 3

Annual per capita income change from migration, by rural-urban categories, 1992-95

Income declined in core counties of largest metro areas; highest nonmetro gains were found in completely rural counties



Note: See appendix for definition of rural-urban categories. Source: Calculated by ERS using data from the Internal Revenue Service. Migration's effect on income varied substantially among counties with differing economic activities. Counties dependent on farming and mining experienced negative or very slow income growth from migration, while per capita income in counties dependent on the rapidly expanding rural service sector grew by \$91 per year (fig. 4). Manufacturing counties gained population through net migration at the overall nonmetro rate (0.6 percent), but gained per capita income at only a fraction of the overall rate (\$2 as compared with \$30).

Retirement-destination counties not only showed the highest per capita income gains from migration, \$201, but were the only county type where the income of inmigrants was higher than the income of nonmigrants. This is not entirely unexpected since, by definition, retirement destinations attract large numbers of older migrants who as a group tend to have relatively high incomes. In addition to retirement destinations, counties with a large proportion of federally owned land are also rich in natural amenities. These two county types (which overlap somewhat) had the highest rates of net inmigration as well as the highest income growth from migration of all county types. Well-to-do migrants tend to spur the local economy. The additional \$201 in per capita income in a retirement-destination county represents, on average, \$4.7 million additional income in the county per year. A substantial amount of this additional income would be spent in the county on goods and services.

Income Migration Trends Over Time Hard To Predict

It is often assumed that any net inmigration is a boon to the local economy, but this depends on the economic characteristics of the inmigrants and outmigrants. In 1992-95, not all counties with high net inmigration attracted high-income migrants. In the rural-urban distribution of income migration, rural areas fared rather well on average, but geographically this outcome was distributed very unevenly, and the differences appear to have resulted more from the natural amenities of counties than from the job opportunities offered by their economies (fig. 5).

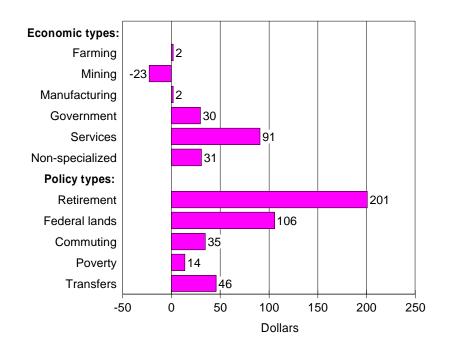
Although traditional economic strategies will continue to be important to the vitality of rural communities, strategies that build on their natural amenities and rural residential desirability will become increasingly important. Rural communities cannot change their climate or import mountains; however, they can protect and enhance (and, to some extent, market) the natural resources they do have. And they can complement their natural advantage of rurality itself with other factors such as health, education, and cultural services that make rural communities attractive places for people to live and recreate.

The pull of natural amenities is likely to strengthen in the coming years as the vanguard of the large baby boom cohort edges toward retirement and as high-technology businesses become less attached to major urban centers. However, because the source of data is so new, we do not yet know to what extent the patterns of income migration described here are associated with the growing amenity-based rural economy. Do these patterns differ from those of the past? Are they, in fact, changing the spatial distribution of income, or are they patterns that are longstanding and arise from life-cycle migration patterns? Monitoring income changes and migration over the next few years will help provide answers to these questions. [John Cromartie, 202-219-0192 (after October 24, 202-694-5421), jbc@econ.ag.gov; and Mark Nord, 202-219-0554 (after October 24, 202-694-5433), marknord@econ.ag.gov]

Figure 4

Annual per capita income change from migration, by county type, 1992-95

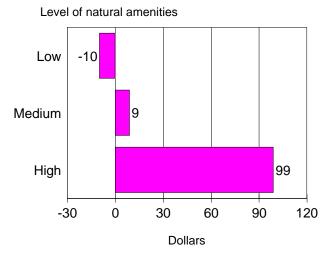
Retirement destinations attracted high-income migrants



Note: See appendix for definition of county types. Source: Calculated by ERS using data from the Internal Revenue Service.

Figure 5
Nonmetro annual per capita income change from migration, by level of natural amenities, 1992-95

Highest migration-induced income gains were found in high-amenity counties



Note: Natural amenities are measured using the ERS natural amenities index. See appendix for a definition. The high and low categories measure the income change for the 25 percent of nonmetro counties with the highest and lowest natural amenities, respectively.

Source: Calculated by ERS using data from the Internal Revenue Service.